PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Kathryn F. Sykes Stephen A. Johnston

Serial No.: Unassigned

Filed: Concurrently Herewith

For: LINEAR AND CIRCULAR EXPRESSION

ELEMENTS

Group Art Unit: Unknown

Examiner: Unknown

Atty. Dkt. No.: UTSD:557USD5/MBW

11911 V. S.08 10/077508

CERTIFICATE OF EXPRESS MAIL
NUMBEREL780049375US
DATE OF DEPOSITFebruary 15, 2002

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

25123886.1

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record.

In accordance with 37 C.F.R §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R.

§§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is hereby authorized to deduct said fees from Fulbright & Jaworski Deposit Account No.: 50-1212/10200693/MBW.

This application is a divisional application of Serial No. 09/535,366, filed March 24, 2000, and is relied upon for an earlier filing date under 35 U.S.C. § 120. In accordance with Rule 37 C.F.R. § 1.98(d) copies of the listed documents are not enclosed as they have been previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. 09/535,366.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,

Mark B. Wilson Reg. No. 37,259

Attorney for Applicants

FULBRIGHT & JAWORSKI L.L.P. 600 Congress Avenue, Suite 2400 Austin, Texas 78701 (512) 536-3035

Date: February 15, 2002

			<u>-</u>	
Form PTO-1449 (modified)		Atty. Docket No.	Serial No.	
		UTSD:557USD5	Unassigned	
List of Patents and Publications for Applicant's		Applicant		2
		Kathryn F. Sykes and	Stephen A. Johnston	ص <u>ه</u>
INFORMATION DISCLOSURE ST	ATEMENT	i		
		Filing Date:	Group:	
(Use several sheets if necessar	y)	filed concurrently	unknown	
		herewith		100
U.S. Patent Documents	Foreign 1	Patent Documents	Other Art	5
See Page 1		See Page 1	See Page 1	

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	Al	5,703,057	12/30/97	Johnston et al.	514	44	4/7/95
	A2	6,001,590	12/14/99	Komeda et al.	435	69.1	09/12/96
	A 3	6,143,530	11/7/00	Crouzet et al.	435	91.42	2/21/96
	A4	6,280,977	8/28/01	Liang et al.	435	91.2	3/23/00

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1	DD 206791	02/08/84	German Democratic Rep.			No
	B2	EP 220482	05/06/87	Europe			
	B3	JP 6253863	09/13/94	Japan			No
	B4	JP 9135694	05/27/97	Japan			No
-	B5	WO 0056914	9/28/2000	PCT			
	В6	WO 92/08798	05/29/82	PCT			
	B7	WO 93/24639	12/09/93	PCT			
	B8	WO 96/26270	8/29/96	PCT			
	В9	WO 97/10345	03/20/97	PCT			Abstract
	B10	WO 98/38296	09/03/98	PCT			
	B11	WO 99/02671	1/21/99	PCT			
	B12	WO 99/45130	09/10/99	PCT			
	B13	WO 99/66053	12/23/99	PCT			

25123882.1

EXAMINER: DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Form PTO-1449 (modified)		Atty. Docket No. UTSD:557USD5	Serial No. Unassigned
List of Patents and Publications for Applicant's		Applicant Kathryn F. Sykes and Stephen A. Johnston	
INFORMATION DISCLOSURE S	TATEMENT		-
(Use several sheets if necessa	nry)	Filing Date: filed concurrently herewith	Group: unknown
U.S. Patent Documents See Page 1	1	Patent Documents See Page 1	Other Art See Page 1

Exam. Init.	Ref. Des.	Citation
	C1	Aslanidis and Jong, "Ligation-independent cloning of PCR products (LIC-PCR)," <i>Nucl. Acids Res.</i> , 18:6069-6074,1990.
	C2	Aslanidis et al., "Minimal length requirement of the single-stranded tails for ligation-independent cloning (LIC) of pcr products," PCR Methods and Applications, 4:172-177, 1994.
	C 3	Barry et al., "Protection against mycoplasma infection using expression-library immunization," <i>Nature</i> , 377:632-635, 1995.
	C4	Bolen et al., "Isolation and sequence analysis of a gene from the linear DNA plasmid pPacl-2 of pichia acaciae that shows similarity to a killer toxin gene of Kluyveromyces lactis," <i>Yeast</i> , 10:403-414, 1994.
	C5	Buttrick <i>et al.</i> , "Behavior of genes directly injected into the rat heart in vivo," <i>Circulation Res.</i> , 70:193-198, 1992.
	C6	Carlyon et al., "Analysis of the organization of multicopy linear- and circular-plasmid-carried open reading frames in borrelia burgdorferi sensu lato isolates," <i>Infect. Immun.</i> , 66:1149-1158, 1998.
	C7	Cassata et al., "Rapid expression screening of <i>caenorhabditis elegans</i> homeobox open reading frames using a two-step polymerase chain reaction promoter- <i>gfp</i> reporter contstruction technique," <i>Gene</i> , 212:127-135, 1998.
	C8	Court and Bertrand, "Expression of the open reading frames of a senescence-inducing, linear mitochondrial plasmid of neurospora crassa," <i>Plasmid</i> , 30:51-66, 1993.
	C9	Felgner and Liang, "Debugging expression screening," Nature Biotech., 17: 329-330, 1999.
	C10	Griffith and Yang, "Recombination between heterologous linear and circular mitochondrial plasmids in the fungus neurospora," <i>Mol. Gen. Genet</i> , 249:25-36, 1995.
	C11	Grzeszik et al., "Genes encoding the NAD-reducing hydrogenase of rhodococcus opacus mr11," <i>Microbiology.</i> , 143:1271-1286, 1997.
	C12	Gusew et al., "Linear DNA must have free ends to transform rat cells efficiently," Mol. Gen. Genet., 206:121-125, 1987.
	C13	Haun and Moss, "Ligation-independent cloning of gluthathione S-transferase fusion genes for expression in Escherichia coli," <i>Gene</i> , 112:37-43, 1992.

25123882.1

EXAMINER:	DATE CONSIDERED:
	DATE CONSIDERED.

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Form PTO-1449 (modified)		Atty. Docket No. UTSD:557USD5	Serial No. Unassigned
List of Patents and Publications for Applicant's		Applicant Kathryn F. Sykes an	d Stephen A. Johnston
Information Disclosure St	ATEMENT		
(Use several sheets if necessar	у)	Filing Date: filed concurrently herewith	Group: unknown
U.S. Patent Documents	Foreign 1	Patent Documents	Other Art
See Page 1		See Page 1	See Page 1

Exam. Init.	Ref. Des.	Citation
	C14	Haun et al., "Rapid, reliable ligation-independent cloning of pcr products using modified plasmid vectors," <i>Biotechniques</i> , 12:515-518, 1992.
	C15	Johnston and Barry, "Genetic to genomic vaccination," Vaccine, 15:808-809, 1997.
	C16	Kain et al., "Universal promoter for gene expression without cloning: Expression-PCR," <i>Biotechniques</i> , 10:366-368, 370, 371, 374, 1991.
	C17	Kaluz and Flint, "Ligation-independent cloning of pcr products with primers containing nonbase residues," <i>Nucl. Acids Res.</i> , 22:4845, 1994.
	C18	Kamper et al., "Heterologous gene expression on the linear DNA killer plasmid from Kluyveromyces lactis," <i>Curr. Genet.</i> , 19:109-118, 1991.
	C19	La Flamme et al., "Trypanosoma cruzi: expression of interleukin-2 utilizing both supercoiled plasmids and linear DNA's," <i>Exp. Parasitol.</i> , 83:159-163, 1996.
	C20	Li et al., "Delivery of a PCR amplified DNA fragment into cells: a model for using synthetic genes for gene therapy," Gene Therapy, 4:449-454, 1997.
	C21	Lobocka et al, "Characterization of the primary immunity region of the <i>Escherichia coli</i> linear plasmid prophage N15," <i>J. Bacteriol.</i> , 178:2902-2910, 1996.
	C22	Logel <i>et al.</i> , "Synthesis of crna probes from pcr-generated dna," <i>Biotechniques</i> , 13:604-610, 1992.
į	C23	Mead et al., "A universal method for the direct cloning of pcr amplified nucleic acid," Biotechnology, 9:657-663, 1991.
	C24	Meinhardt et al., "A novel approach to express a heterologous gene kluyveromyces lactis linear killer plasmids: expression of the bacterial APH gene from a cytoplasmic promoter fragment without in-phase fusion to the plasmid open reading frame," <i>Plasmid.</i> , 32:318-327, 1994.
	C25	Monoco <i>et al.</i> , "Expression of recombinant human granulocyte colony-stimulating factor in CHO dhfr cells: new insights into the in vitro amplification expression system," <i>Gene</i> , 180:145-150, 1996.
	C26	Nisson et al., "Rapid and efficient cloning of Alu-PCR products using uracil DNA glycosylase," PCR Methods and Applications, 1:120-123, 1991.

25123882.1

Examiner:	DATE CONSIDERED:
EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR	NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH
CITATION IE NOT IN CONFORMANCE AND NOT CONSIDERD INCI	LIDE CODY OF THIS FORM WITH NEVT COMMINICATION TO ADDITIONT

Form PTO-1449 (modified) List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT		Atty. Docket No. UTSD:557USD5	Serial No. Unassigned
		Applicant Kathryn F. Sykes and Stephen A. Johnston	
(Use several sheets if necessa	ry)	Filing Date: filed concurrently herewith	Group: unknown
U.S. Patent Documents See Page 1	1	Patent Documents See Page 1	Other Art See Page 1

Exam. Init.	Ref. Des.	Citation
	C27	Rashtchian et al., "Uracil; DNA glycosylase-mediated cloning of polymerase chain reaction-amplified DNA: Application to genomic and cDNA cloning," <i>Anal. Biochem</i> , 206:91-97, 1992
	C28	Rashtchian, "Novel methods for cloning and engineering genes using the polymerase chain reaction," <i>Curr. Opin. Biotech.</i> , 6:30-36, 1995.
	C29	Sampath <i>et al.</i> , "Versatile vectors for direct cloning and ligation-independent cloning of pcramplified fragments for surface display on filamentous bacteriophages," <i>Gene</i> , 190:5-10, 1997
	C30	Schickel et al., "Kluyveromyces lactis killer system: analysis of cytoplasmic promoters of the linear plasmids," <i>Nucleic. Acids Res.</i> , 24:1879-1886, 1996.
	C31	Schrunder and Meinhardt, "An extranuclear expression system for analysis of cytoplasmic promoters of yeast linear killer plasmids," <i>Plasmid</i> , 33:139-151, 1995.
	C32	Schunder et al., "Extranuclear expression of the bacterial xylose isomerase (xylA) and the udp-glucose dehydrogenase (hasB) genes in yeast with kluyveromyces lactis linear killer plasmids as vectors," <i>Curr. Microbiol.</i> , 33:323-330, 1996.
	C33	Sekine et al., "Identification and characterization of the linear IS3 molecules generated by staggered breaks," <i>J. Biol. Chem.</i> , 271:197-202, 1996.
	C34	Switzer et al., "Rapid screening of open reading frames by protein synthesis with an in vitro transcription and translation assay," <i>Biotechniques</i> , 18:244-248, 1995.
	C35	Sykes and Johnston, "Linear expression elements: a rapid, in vivo, method to screen for gene functions," <i>Nat. Biotech.</i> , 17:355-359, 1999.
	C36	Tang et al., "Genetic immunization is a simple method for eliciting an immune response," <i>Nature</i> , 356:152-154, 1992.
	C37	Tanguy-Rougeau et al., "Expression of a foreign Km ^R gene in linear killer DNA plasmids in yeast," <i>Gene.</i> , 91:43-50, 1990.
	C38	Ton-Hoang et al., "Efficient transportation of IS911 circles in vitro," <i>Embo. J.</i> , 17:1169-1181, 1998.
	C39	Turner and Moyer, "A PCR-based method for manipulation of the vaccinia virus genome that eliminates the need for cloning," <i>BioTechniques</i> , 13:764-771, 1992.
	C40	Wess, "German start-up mologen to develop DNA vaccines," Article

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Form PTO-1449 (modified)		Atty. Docket No.	Serial No.
		UTSD:557USD5	Unassigned
List of Patents and Publications for Applicant's		Applicant	
		Kathryn F. Sykes and Stephen A. Johnston	
INFORMATION DISCLOSURE S	TATEMENT		
		Filing Date:	Group:
(Use several sheets if necessary)		filed concurrently herewith	unknown
U.S. Patent Documents	Foreign Patent Documents		Other Art
See Page 1		See Page 1	See Page 1

Exam. Init.	Ref. Des.	Citation
	C41	Xie and Tsong, "Study of mechanisms of electric field-induced DNA transfection. V. effects of DNA topology on surface binding, cell uptake, expression, and integration into host chromosomes of DNA in the mammalian cell," <i>Biosphys. Jour.</i> , 65:1684-1689, 1993.

25123882.1

EXAMINER: DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.